A CURSORY GLANCE

According to the rumor mill, about the only company in the United States that is <u>not</u> negotiating to take over Commodore is Radio Shack. We have heard "serious" rumors that Motorola, Rockwell, Xerox, and – get this – IBM, have considered purchasing Commodore. In the last six months Commodore stock has gone from $22 to over $100 per share. With all this smoke, where is the fire?

For one thing, Commodore hardware is selling <u>very</u> well. (However, the 8K Pet will probably be dropped in favor of the more profitable 16K and 32K models.) Another factor is the new $295 VIC computer that will replace the small PET. The VIC-20 will attach to your television set and display 22 characters across the screen. The user will have 3.5K of RAM memory, upper and lower case and a large keyboard. There will be color and built-in three-voice sound. VIC cassette tapes will probably <u>not</u> be interchangeable with the PET. VIC Basic will be similar to PET Basic, but not identical.

Who will buy VIC? Well, Commodore hopes to sell a lot of the product in Japan where it is being manufactured. In the U.S., they hope to run away with the low-end computer market. A much bigger question is <u>why</u> will anyone buy such a limited computer? The quick answer is that they won't know any better. That answer is both truthful, and at the same time somewhat unfair. It is truthful when you consider what resources are needed in order to solve significant problems with a computer. You can write useful programs on an 8K PET, but as most of you have found out, it is a real challenge. So what do you do with a 3.5K VIC? It is very simple: either you play a few games with it (probably using ROM cartridges), or you work with it for about a month, and then you go and buy the plug-in 3K memory expander. (What I'm saying is that the VIC is designed as a "Barbie Doll" computer: they will make some money on the doll, but the serious bucks are made selling all those clothes the doll needs!)

The "because they don't know any better" answer is unfair because it ignores the huge demand for personal computers that isn't currently met due to price. While an 8K PET is an excellent value at $795, many folks that would like to have a computer are not willing to spend that much money, at least not that much <u>at once</u>! Commodore will face some tough competition: the new Color TRS-80 from Radio Shack is another nice little "Barbie Doll". (For $399 you get a 4K machine with a poor Basic. For only $119 you can expand the memory to 16K, and for another $99 you get a useable Basic.) Don't forget Atari, either. While the Atari 400 can never sell for $295, it is currently discounted at close to $400. And it is a fine little machine with the most powerful graphics of any of the current low-cost computers.

Quick notes: Commodore will soon announce an 8096 model CBM with 96K of memory. The long awaited 8050 disk is out, and first reports from users are positive. The Pascal programming language for the Pet should be at your dealer by late October.

CURSOR 22 HAS THESE PROGRAMS: (Program names ending with '!' use CB2 sound)	
COVER22	The Waves of Change? Graphics by George MacRae.
KALAH	Try to get all of the stones into your Kalah. By Dale Cooper.
POKER	Try your hand against our dealer. By David A. Hook.
MATCH	Remember where the numbers are that add up to your success. By George MacRae.
THUNT!	Find the hidden treasure while evading the robots. By Chris Torkildson.
COMPARE	Compare two Basic programs (on disk) and display the differences on the screen or the printer. By Glen Fisher.

MORE ABOUT THE PROGRAMS

KALAH... This game from Africa has a long and distinguished history. The basic idea is very simple: you and your opponent each try to gather the most stones into your 'Kalah'. Each player has 6 "pits" and 1 "Kalah". The pits are in rows, opposite each other, with the Kalahs at either end. At the start of the game, each pit is filled with a certain number of stones, which you may choose, or let the Pet choose for you. You start the game by choosing a pit, gathering all the stones from that pit, and then dropping them one by one counter-clockwise into your pits, your Kalah, and then your opponent's pits (but never into your opponent's Kalah). The turns alternate between players until all of the pits on one side are empty. At this point, the remaining stones are placed into the remaining player's Kalah, the stones in each Kalah are totaled, and the player with the most stones wins!

There are some interesting twists! For instance, if the last stone you drop lands in your Kalah, then you get an extra turn. Also, if your last stone lands in an empty pit on your side, then the stones in that pit and the pit opposite (on your opponent's side) are all placed in your Kalah. (Watch out, the computer is great at that last one!)

When you play against the Pet, be prepared for a tough game! Remember to try to end your turn on your side, preferably in an empty pit, or in your Kalah. Naturally, the game takes longer to play when you specify more stones for each pit when the game begins. You may want to practice with as few as three stones per pit at first. For a good description of a computerized Kalah, see Chapter 14 of Etudes for Programmers by Charles Wetherell (Prentice-Hall, 1968). It is a fun book that is full of useful ideas, and is the best source of intermediate programming assignments you'll find anywhere.

POKER... As you might guess, in this game you play poker against our heartless dealer. You start off with a pot of $1000, and depending upon how much you bet, the stakes are set accordingly. For instance, one pair and you break even, two pair and you triple your bet, etc. As soon as you place your bet, the 'house' (actually, it's your friendly Pet!) takes your money, and returns it only when you win. The house limit is $10,000 per hand, which isn't exactly penny-ante!

MATCH... If you remember how to play concentration, then you'll be in good shape for this game. If you're good with your addition, then you'll be in even better shape, and if you've got an excellent memory, then you're ready for the computer olympics!

A board with 24 squares is displayed, with each square lettered from A to X. Hidden underneath each square is a number. The object of MATCH is to choose a pair of numbers that, when added together will equal the sum chosen by the computer. When a player uncovers such a pair he wins a point and another turn, (and the pair of numbers is removed from the board).

One to four players can play, and the game is over when one of you wins the majority of the points. If you're playing against the PET, you can control how well he remembers where the numbers are, anywhere from random guesses to allowing PET to use his (infallible!) memory.

MATCH can be made simpler for younger players by adjusting the sum chosen by the Pet. Normally, the value chosen for the sum is between 50-99. To change the sum, modify line 270, which normally says:

    270 M=0: TH=INT(RND(1)*50+50)

In the expression (RND(1)*50+50), you might substitute (RND(1)*X+y), where X = (upper limit - lower limit) + 1, and Y = the lower limit. For example, if you want the sum to vary between 15 and 30, change (RND(1)*50+50) to (RND(1)*16+15), where x=16=(30-15)+1 and y=15. Here is one more example: To make the sum vary betweeen 5 and 20, change line 270 to:

    270 M=0: TH=INT(RND(1)*16+5)

THUNT... You are in an underground tunnel system, searching for a hidden treasure. All you have is a hint of where the treasure is in the maze, and you must find it, using the keypad to move about (6 moves right, 4 moves left, 8 moves up, 2 moves down, and 5 leaves you right where you are). You have five seconds to move. To complicate your search, there are vicious robots patrolling the corridors. A good thief must avoid being seen as well as being caught. If you find yourself in the same corridor as a robot, you may be spotted, which has the effect of giving the robots an additional move for each of yours.

When you discover a treasure, you have 25 seconds to unscramble a word. If you successfully decode the word, you are given a hint about where the next treasure is. If you cannot decode the word, or if you've found the third treasure, then you are given a hint about where the exit is and you must try to escape immediately!

If you want to make the game more challenging, then start off with more robots, but beware! After you find the first and second treasure, one robot is added, and after the third treasure is found, four more robots are added. Don't despair, though, as you'll receive points for all your efforts, depending upon how diabolical you are. Try for 1000, and if you score less than 200, keep trying; 300 is pretty good, and more than 700, crown jewels - watch out!

If you want to stop playing, simply type a 'Q'. If you want to change the words that your Pet gives you to decode, the word lists are located on DATA statements in lines 1590 to 1620. If you have an 8K Pet, be careful, since the program is very close to memory limits. Each word list in the DATA statements begin with the letter X, followed by a number which indicates the number of words in the list.

COMPARE... NOTE: This program requires the Commodore 2040 disk or equivalent. Compare is the sort of utility program that is only needed every now and then, but when you need it, you really need it! Compare reads two versions of a Basic program, and compares them, line by line. If you have a printer, it will show the differences on the printer, otherwise it will display them on the screen of the Pet.